

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for forming a channel plate, comprising:
 - (a) abrading at least one channel in a substrate by ejecting particles toward the substrate;
 - (b) heating the substrate to a temperature in the range between an annealing point and a softening point of the substrate; and
 - (c) cooling the substrate.
2. (Original) The method of claim 1, wherein the substrate is heated in an environment containing a mixture of nitrogen with water vapor.
3. (Original) The method of claim 2, wherein the percentage of water vapor in the environment in which the substrate is heated is in the range of 10% to 25%, but about 5% below the saturation point.
4. (Original) The method of claim 1, wherein the substrate is heated in an environment containing air.
5. (Original) The method of claim 1, wherein the substrate is heated in an environment containing nitrogen gas.
6. (Original) The method of claim 1, wherein the substrate comprises ceramic.
7. (Original) The method of claim 1, wherein the substrate comprises glass.

8. (Original) The method of claim 7, wherein the glass type is Corning®1737 Glass.
9. (Original) The method of claim 8, wherein the substrate is heated to a temperature in the range of about 721°C to 975°C.
10. (Original) The method of claim 9, wherein a maximum heating temperature is maintained for at least ten minutes.
11. (Original) The method of claim 7, wherein the glass type is Pyrex® Brand 7740 Glass.
12. (Original) The method of claim 11, wherein the substrate is heated to a temperature in the range of about 560°C to 821°C.
13. (Original) The method of claim 12, wherein a maximum heating temperature is maintained for at least ten minutes.
14. (Original) The method of claim 1, wherein the substrate is heated to a temperature that heals micro cracks in the substrate while minimizing sagging of macro features of the substrate.
15. (Original) The method of claim 1, wherein the substrate is heated to a temperature that smoothes the surface of the substrate without disturbing macro features of the substrate.
16. (Original) The method of claim 1, wherein the substrate is heated for a period of time in the range of approximately ten to one hundred twenty minutes.

17. (Original) The method of claim 1, wherein the substrate is oriented with the at least one channel facing up when heated.
18. (Original) The method of claim 1, wherein the substrate is oriented with the at least one channel facing down when heated.
19. (Original) The method of claim 1, wherein the substrate is supported on a polished, low porosity surface during said heating.
20. (Original) The method of claim 1, wherein the substrate is heated in a furnace wherein the temperature is ramped from 25°C at a rate of about 20°C to 40°C per minute.
21. (Original) The method of claim 20, wherein the substrate is cooled to 25°C at a ramp rate of about 20°C to 40°C per minute.
22. (Currently Amended) A method for healing cracks in a switch substrate, comprising:
 - (a) heating the switch substrate to a temperature in the range between an annealing point and a softening point of the substrate; and
 - (b) maintaining the temperature for a period of time selected to heal micro cracks formed in at least one channel of the switch substrate; and
 - (c) ~~(b)~~ cooling the substrate.
23. (Original) The method of claim 22, wherein the substrate is heated in an environment containing a mixture of nitrogen with water vapor.
24. (Original) The method of claim 23, wherein the percentage of water vapor in the environment in which the substrate is heated is in the range of about 10% to 25%, but about 5% below the saturation point.

Claims 25-28: (Cancelled)

29. (New) The method of claim 8, wherein the substrate is heated to a temperature in the range of about 890°C to 975°C.
30. (New) The method of claim 11, wherein the substrate is heated to a temperature in the range of about 734°C to 821°C.
31. (New) A method for forming a channel plate, comprising:
- (a) abrading at least one channel in a substrate, which in turn forms micro cracks in the at least one channel during the abrading the at least one channel in the substrate;
 - (b) heating the substrate to a temperature in the range between an annealing point and a softening point of the substrate;
 - (c) maintaining the temperature for a period of time selected to heal the micro cracks formed in the at least one channel; and
 - (d) cooling the substrate.
32. (New) The method of claim 31, wherein the abrading the at least one channel creates a maximum channel depth, wherein the abrading forms the micro cracks with a maximum crack length, and wherein the maximum crack length is shorter than the maximum channel depth.
33. (New) The method of claim 31, wherein the abrading the at least one channel in the substrate roughens a surface in the at least one channel, and further comprising maintaining the temperature for a period of time selected to smooth the surface roughened in the at least one channel.
34. (New) A method for forming a channel plate, comprising:
- (a) abrading at least one channel in a substrate by ejecting particles toward the substrate;

- (b) heating the substrate to a temperature in the range between an annealing point and a softening point of the substrate;
- (c) maintaining the temperature for a period of time selected to heal micro cracks in a surface of the at least one channel without distorting an overall geometry of the substrate; and
- (d) cooling the substrate.

35. (New) A method for forming a channel plate, comprising:

- (a) abrading at least one channel in a substrate by ejecting particles toward the substrate;
- (b) heating the substrate to a temperature in the range between an annealing point and a softening point of the substrate;
- (c) maintaining the temperature for a period of time selected to smooth the surface of the at least one channel in the substrate without distorting an overall geometry of the substrate; and
- (d) cooling the substrate.